Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of adhering two or more surfaces, the method comprising:

i.) providing a first surface comprising a plurality of nanofibers attached thereto;

ii.) providing at least a second surface; and,

iii.) contacting the first surface and the at least second surface, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side surface of said nanofibers wherein the contacting adheres the first surface to the second surface substantially by ~~creates~~ van der Waals forces between the nanofibers and the second surface ~~which van der Waals forces are sufficient to adhere the surfaces together~~.

2. (Original) The method of claim 1, wherein one or more of the first surface, the at least second surface, and the plurality of nanofibers, comprise a material selected from the group consisting of: silicon, glass, quartz, plastic, metal, polymers, TiO, ZnO, ZnS, ZnSe, ZnTe, CdS, CdSe, CdTe, HgS, HgSe, HgTe, MgS, MgSe, MgTe, CaS, CaSe, CaTe, SrS, SrSe, SrTe, BaS, BaSe, BaTe, GaN, GaP, GaAs, GaSb, InN, InP, InAs, InSb, PbS, PbSe, PbTe, AlS, AlP, AlSb, SiO_1, SiO_2, silicon carbide, silicon nitride, polyacrylonitrile (PAN), polyetherketone, polyimide, an aromatic polymer, and an aliphatic polymer.

3. (Withdrawn) The method of claim 1, wherein contacting the first surface and the at least second surface comprises creation of van der Waals attraction between the surfaces.

4. (Previously Presented) The method of claim 1, wherein the van der Waals forces comprises from at least about 0.1 newton per centimeter^2 to at least about 100 newtons per centimeter^2.

5. (Previously Presented) The method of claim 1, wherein the van der Waals forces comprises from at least about 0.5 newton per centimeter^2 to at least about 50 newtons per centimeter^2.

6. (Previously Presented) The method of claim 1, wherein the van der Waals forces comprises from at least about 1 newton per centimeter^2 to at least about 25 newtons per centimeter^2.

7. (Previously Presented) The method of claim 1, wherein the van der Waals forces comprises from at least about 2 newtons per centimeter^2 to at least about 10 newtons per centimeter^2.

8. (Previously Presented) The method of claim 1, wherein contacting the first surface and the at least second surface creates friction forces between the surfaces, which friction forces are greater than a friction force between the first surface and the at least second surface in the absence of the plurality of nanofibers..

9. (Original) The method of claim 1, wherein the first surface comprises a surface density of members of the plurality of nanofibers, which surface density comprises from at least about 1 nanofiber per micron^2 to 1000 or more nanofibers per micron^2.

10. (Previously Presented) The method of claim 1, wherein the first surface comprises a surface density of members of the plurality of nanofibers, which

surface density comprises from at least about 5 nanofibers per micron^2 to about 500 nanofibers per micron^2.

11. (Previously Presented) The method of claim 1, wherein the first surface comprises a surface density of members of the plurality of nanofibers, which surface density comprises from at least about 10 nanofibers per micron^2 to about 250 nanofibers per micron^2.

12. (Previously Presented) The method of claim 1, wherein the first surface comprises a surface density of members of the plurality of nanofibers, which surface density comprises from at least about 50 nanofibers per micron^2 to about 100 nanofibers per micron^2.

13. (Original) The method of claim 1, wherein the first surface and the at least second surface comprise a same material.

14. (Original) The method of claim 1, wherein the nanofibers comprise hollow nanotubular structures.

15. (Previously Presented) The method of claim 1, wherein substantially all of the plurality of nanofibers comprise one or more associated moiety.

16. (Previously Presented) The method of claim 15, wherein substantially all of the plurality of nanofibers comprise a coating of the one or more associated moiety.

17. (Original) The method of claim 15, wherein the one or more moiety comprises a functional moiety.

18. (Original) The method of claim 17, wherein the functional moiety increases a van der Waals attraction between the nanofiber and the at least second surface, which increased attraction is greater than a van der Waals attraction between the nanofiber and the at least second surface in the absence of the moiety.

19. (Original) The method of claim 17, wherein the functional moiety increases friction forces between the nanofiber and the at least second surface, which increased friction forces are greater than a friction force between the nanofiber and the at least second surface in the absence of the moiety.

20. (Original) The method of claim 17, wherein the functional moiety comprises a covalent bond between the nanofiber and the at least second surface.

21. (Original) The method of claim 1, wherein the at least second surface comprises a plurality of nanofibers attached thereto.

22. (Original) The method of claim 1, wherein substantially each member of the plurality of nanofibers passes more than once, through a selected plane above the first substrate.

23. (Currently Amended) A method of joining two or more articles, the method comprising:

i) providing a first article having at least a first surface, wherein the first surface comprises a plurality of nanofibers attached thereto,

ii) providing at least a second article having at least a first surface which does not comprise nanofibers;

iii) mating the first surface of the second article with the plurality of nanofibers on the first surface of the first article, whereby the nanofibers contact the first surface of the second article at a plurality of contact points, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side surface of said nanofibers wherein the contacting adheres the first surface to the second surface substantially by ~~creates~~ van der Waals forces between the nanofibers and the second surface~~, such~~

~~that the van der Waals forces between the nanofibers and the first surface of the second article are sufficient to adhere the first article to the second article~~.

24. (Withdrawn) The method of claim 23, wherein the forces between the nanofibers and the first surface of the second article comprise van der Waals forces.

25. (Previously Presented) The method of claim 23, wherein the forces between the nanofibers and the first surface of the second article additionally comprise friction forces.

26. (Original) The method of claim 23, wherein the plurality of contact points comprises a density of contact points per unit area of the second surface.

27. (Previously Presented) The method of claim 26, wherein the density of contact points comprises from at least about 1 nanofiber per micron^2 to about 2000 nanofibers per micron^2.

28. (Previously Presented) The method of claim 26, wherein the density of contact points comprises from at least about 5 nanofibers per micron^2 to about 1000 nanofibers per micron^2.

29. (Previously Presented) The method of claim 26, wherein the density of contact points comprises from at least about 10 nanofibers per micron^2 to about 500 nanofibers per micron^2.

30. (Previously Presented) The method of claim 26, wherein the density of contact points comprises from at least about 50 nanofibers per micron^2 to about 250 nanofibers per micron^2.

31. (Previously Presented) The method of claim 26, wherein the density of contact points comprises from at least about 75 nanofibers per micron^2 to about 150 nanofibers per micron^2.

32. (Original) The method of claim 23, wherein the plurality of contact points comprises a percent contact area of the second surface.

33. (Previously Presented) The method of claim 32, wherein the percent contact area comprises from about 0.1% to at least about 50%.

34. (Previously Presented) The method of claim 32, wherein the percent contact area comprises from about 0.5% to at least about 40%.

35. (Previously Presented) The method of claim 32, wherein the percent contact area comprises from about 1% to at least about 30%.

36. (Previously Presented) The method of claim 32, wherein the percent contact area comprises from about 2% to at least about 20%.

37. (Previously Presented) The method of claim 32, wherein the percent contact area comprises from about 5% to at least about 10%.

38. (Original) The method of claim 23, wherein the plurality of contact points comprises a density of contact points per unit area of the second surface and wherein the plurality of contact points comprises a percent contact area of the second surface.

39. (Withdrawn) The method of claim 38, wherein the density of contact points comprises from at least about 1 nanofiber per micron^2 to about 2000 or more nanofibers per micron^2, from at least about 5 nanofiber per micron^2 to about 1000 or more nanofibers per micron^2, from at least about 10 nanofiber per micron^2 to about 500 or more nanofibers per micron^2, from at least about 50 nanofiber per micron^2 to about 250 or more nanofibers per micron^2, or from at least about 75 nanofiber per micron^2 to about 150 or more nanofibers per micron^2; and, the plurality of contact points comprises a percent contact area of the second surface from about 0.1% to at least about 50% or more, from about 0.5% to at least about 40% or more, from about 1% to at least

about 30% or more, from about 2% to at least about 20% or more, or from about 5% to at least about 10% or more.

40. (Currently Amended) A method of joining two or more articles, the method comprising:

i) providing a first article having at least a first surface;

ii) providing at least a second article having at least a first surface; and,

iii) providing a layer of ~~semiconductor~~ silicon nanofibers disposed between the first surface of the first article and the first surface of the at least second article, whereby the nanofibers contact the first surface of the first article at a plurality of contact points and the first surface of the at least second article at a plurality of contact points, wherein at least a portion of the plurality of nanofibers contacts the first surface of the first and second articles on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the first surface of the first and second articles, such that the van der Waals forces between the nanofibers and the first surface of the first article and the first surface of the at least second article are sufficient to adhere the articles together.

41. (Withdrawn) The method of claim 40, wherein the forces between the nanofibers and the first surface of the second article and between the nanofibers and the first surface of the first article, comprise van der Waals forces.

42. (Previously Presented) The method of claim 40, wherein the forces between the nanofibers and the first surface of the second article and between the nanofibers and the first surface of the first article, further comprise friction forces.

43. (Currently Amended) An adhesive device, the device comprising:

i) a first article having at least a first surface;

ii) at least a second article having at least a first surface; and,

iii) a layer of ~~semiconductor~~ silicon nanofibers disposed between the first surface of the first article and the first surface of the at least second article, whereby the nanofibers contact the first surface of the first article at a plurality of contact points and the first surface of the at least second article at a plurality of contact points, wherein at least a portion of the plurality of contact points are on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the first surface of the first and second articles, such that the van der Waals forces between the nanofibers and the first surface of the first article and the first surface of the at least second article are sufficient to adhere the articles together.

44. Cancelled.

45. (Withdrawn) The device of claim 43, wherein physical contact between the first and at least second substrate produces a van der Waals attraction between the surfaces.

46. (Currently Amended) The device ~~method~~ of claim 43, wherein contacting the first surface of the first article and the first surface of the at least second article ~~additonally~~ additionally creates friction forces between the surfaces.

47. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 0.1 newton per centimeter^2 to at least about 100 newtons per centimeter^2.

48. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 0.5 newton per centimeter^2 to at least about 50 newtons per centimeter^2.

49. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 1 newton per centimeter^2 to at least about 25 newtons per centimeter^2.

50. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 2 newtons per centimeter^2 to at least about 10 newtons per centimeter^2.

51. (Original) The device of claim 43, wherein the nanofibers comprise hollow nanotubular structures.

52. (Original) The device of claim 43, wherein substantially all nanofibers comprise one or more associated moiety.

53. (Original) The device of claim 52, wherein the one or more moiety comprises a functional moiety.

54. (Previously Presented) The device of claim 53, wherein the functional moiety increases a van der Waals attraction between the nanofiber and one or more of the first surface of the first article or the first surface of the at least second article, to be greater than a van der Waals attraction between the nanofiber and such surfaces in the absence of the moiety.

55. (Currently Amended) The ~~method~~ device of claim 53, wherein the functional moiety increases friction forces between the nanofiber and one or more of the first surface of the first article or the first surface of the at least second article to be greater than a friction force between the nanofiber and such surfaces in the absence of the moiety.

56. (Previously Presented) The device of claim 43, wherein substantially each member of the plurality of nanofibers passes more than once though a selected plane above the first surface of the first and second articles.

57. Cancelled.

58. (Currently Amended) The device of claim 43~~57~~, wherein the silicon nanofibers are grown on one or both of the first surface of the first article and/or the first surface of the second article.

59. (Previously Presented) The device of claim 58, wherein the silicon nanofibers are grown by a VLS process.

60. (Previously Presented) The device of claim 58, wherein the silicon nanofibers have a length of at least about 50 microns.

61. (Currently Amended) A method of adhering two or more surfaces, the method comprising:

iv.) providing a first surface comprising a plurality of silicon nanofibers attached thereto;

v.) providing at least a second surface; and,

vi.) contacting the first surface and the at least second surface, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the second surface which van der Waals forces are sufficient to adhere the surfaces together.

~~The method of claims 1, 23, or 40, wherein the plurality of semiconductor nanofibers comprises a plurality of silicon nanofibers~~

62. (Currently Amended) The ~~device~~ method of claim 61, wherein the silicon nanofibers are grown on one or both of the first surface of the first article and/or the first surface of the second article.

63. (Currently Amended) The ~~device~~ method of claim 62, wherein the silicon nanofibers are grown by a VLS growth process.

64. (Currently Amended) The ~~device~~ method of claim 62, wherein the silicon nanofibers have a length of at least about 50 microns.

65. (New) A method of joining two or more articles, the method comprising:

iv) providing a first article having at least a first surface, wherein the first surface comprises a plurality of silicon nanofibers attached thereto,

v) providing at least a second article having at least a first surface which does not comprise nanofibers;

vi) mating the first surface of the second article with the plurality of nanofibers on the first surface of the first article, whereby the nanofibers contact the first surface of the second article at a plurality of contact points, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the second surface, such that the van der Waals forces between the nanofibers and the first surface of the second article are sufficient to adhere the first article to the second article.